

**Before the Federal Communications Commission**

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*IN THE MATTER OF*

CONCERNS REGARDING IMPACT OF 9-1-1-RELATED SMARTPHONE  
APPLICATIONS AND RELATED PUBLIC SAFETY SERVICES ON DELIVERY  
AND PROCESSING OF REQUESTS FOR EMERGENCY ASSISTANCE

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*ON PUBLIC NOTICE*

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**COMMENTS OF THE  
NATIONAL EMERGENCY NUMBER  
ASSOCIATION**

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## COMMENTS OF THE NATIONAL EMERGENCY NUMBER ASSOCIATION

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The National Emergency Number Association (NENA) respectfully submits the following comments in response to the *Public Notice* released by the Chief of the Public Safety and Homeland Security Bureau on December 19<sup>th</sup>, 2016.

### COMMENTS

**A. The development of 9-1-1-related smartphone applications represents a tremendous opportunity – and challenge – for the public safety community.**

At the outset, NENA wishes to thank the National Association of State 9-1-1 Administrators (“NASNA”) for calling attention to the numerous concerns, issues, and potential opportunities presented by the dawning of an “apps era” for public safety. Moreover, we greatly appreciate the Commission’s swift action to seek information

about the weighty matters raised in NASNA's letter of October 18<sup>th</sup>, 2016.

Over the past five years, numerous application developers have approached NENA either to present information about new products and services they intended to introduce, or to seek our input on ways in which their products and services could be improved. As applications have, in fact, come on the market, our members have experienced first-hand the enormous potential that these new tools hold either to enhance and enrich 9-1-1 service for consumers, or to confuse and degrade public safety response. In some cases, developers have engaged directly with technical and operational subject matter experts from public safety answering points ("PSAPs") and NENA's staff to address critical needs of the 9-1-1 community for reliability, standardization, security, and operational consistency. These developers have, in general, received a positive response from the community, and benefitted greatly from its expertise. Others, however, have launched products or services without such engagement, and, in the worst cases, without even a passing understanding of the practical realities of public safety operations. These developers have, in general, received a negative response from the community, and suffered for this critical oversight. To the extent that issues or concerns raised in NASNA's request fall within the Commission's jurisdiction, NENA supports the institution of a proceeding to address them.

NENA is proud to have been at the forefront of the app revolution, helping to guide the introduction of products and services that may soon improve 9-1-1 service for the public and public safety alike. We therefore take this opportunity to publicly commit to continuing our collaboration with *any* developers who are willing to confront the sometimes-daunting challenge of integrating modern smartphone technology with both legacy E9-1-1 and future NG9-1-1 systems.



**B. 9-1-1-related applications should be held to the same high standards as other components of 9-1-1 systems.**

Among the specific concerns raised by NASNA in its letter, several fall squarely within existing aspects of the Commission's rules. Or, rather, *would* fall within those aspects, if applications were covered by those rules.

For example, NASNA urges the Commission to “[prohibit] the ability to enter and override location information generated by the device and enabling location data to be ‘spoofed’ in a manner that displays information for the purposes of misleading the PSAP and first responders.” Already, Commercial Mobile Radio Service providers are obliged to provide PSAPs with location data that meets specific accuracy requirements. By requiring locations delivered to a PSAP to be accurate, these rules implicitly limit the ability of CMRS providers to utilize user-manipulable location data, at least where no corroborating data is available. Although NENA recognizes that user confirmation or manipulation of location data could be valuable in certain circumstances (particularly for indoor locations), we share NASNA's concerns that not all application developers will have carefully and thoroughly implemented anti-spoofing safeguards, absent clear guidance on the need to do so.

Likewise, NASNA requests that the Commission “ensure[ ] that the 911-related features of a new smartphone application or service have been thoroughly tested to specific standards, including interoperability....,” and “[require] adherence to industry standards for the interconnection to NG911 systems and ensuring that 911 apps use appropriate public-safety grade delivery networks and methods for message routing.” As the primary standards body for 9-1-1-related technology and operations, NENA is particularly sensitive to this concern. Just as standardized interfaces for terminal attachments allowed new and useful telephone-era equipment to proliferate without harm to providers' networks, NENA

strongly believes that adherence to consensus-based community standards will allow safe and effective 9-1-1-related applications to flourish. To that end, our own “i3” standard for NG9-1-1 relies heavily on standards-track protocols and interfaces developed by the Internet Engineering Task Force, and commonly implemented in millions of existing consumer products. We recognize, of course, that the Commission does not usually act as a regulator, investigator, referee, or enforcer of standards compliance. However, there is some precedent for the Commission taking basic actions to *declare* the standards that will be utilized for certain safety-critical services. Recently, for example, the Commission accepted the nearly-unanimous recommendation of the public safety community to require the use of Long-Term Evolution or “LTE” network technology for operations in public safety portions of the 700MHz band. NENA believes standardization and interoperability issues in the 9-1-1 space warrant, at minimum, a more thorough vetting by public comment.

Finally, NASNA raises two related concerns that have plagued the 9-1-1 community at regular intervals for two decades: inadequately-protected 9-1-1 calling triggers, and duplication of calls (or texts) to 9-1-1. Fundamentally, these concerns both speak to the need for effective protections against accidental or malicious initiation of 9-1-1 calls. As the mobile-device industry learned (the hard way) with features like “hold ‘9’ for 9-1-1,” these well-intentioned features often *reduce* consumer access to 9-1-1 service by consuming scarce network and human capacity that could be used to handle actual emergency calls. Whether and under what circumstances such features should be permitted, and what rate-limiting safeguards may be necessary, are subjects into which NENA believes the Commission should inquire.

## CONCLUSION

The Commission should adopt of Notice of Inquiry to seek comment on how best to address these issues and ensure the integrity, efficacy, and availability of 9-1-1 service for all consumers.

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